



F/A-18 A/B/C/D MAINTENANCE TRAINING



MOS 6317 LESSON GUIDES

F/A-18 A/B/C/D MAINTENANCE TRAINING

A.01 (A thru H)	Support / Special Equipment
A.02 (A thru I)	Safety Precautions and Procedures
A.03 (A thru FF)	Aircraft Publications, Diagrams, Sketches, and Drawings
A.04 (A thru T)	Precision Measuring Equipment
A.05 (A thru B)	ESD, Electrical Bonding, and EMC
B.01 (A thru M)	Scheduled / Unscheduled Inspections
B.02 (A thru D)	Technical Directives / Changes / Bulletins
B.03 (A thru D)	Corrosion Control
B.04 (A thru D)	Electronic Equipment Control
B.05 (A thru D)	Intercom Amplifier Control
B.06 (A thru D)	Communication System Control
B.07 (A thru D)	Communication System
B.08 (A thru D)	TACAN System
B.09 (A thru D)	Identify Friend or Foe (IFF) System
B.10 (A thru D)	Instrument Landing System
B.11 (A thru D)	Radar Beacon System
B.12 (A thru D)	Data Link System
B.13 (A thru D)	Auto Direction Finder System
B.14 (A thru D)	Secure Speech System
B.15 (A thru D)	Video Recording System
B.16 (A thru D)	Countermeasures Dispensing System
B.17 (A thru D)	Deceptive Countermeasures System
B.18 (A thru D)	Radar Warning System
B.19 (A thru D)	Interference Blanker System
B.20 (A thru D)	Electronic Altimeter System
B.21 (A thru J)	Wire Repair
B.22 (A thru D)	Multipurpose Display Group
B.23 (A thru D)	RADAR System
B.24 (A thru C)	RADAR Liquid Cooling System
B.25 (A thru D)	Laser Detector Tracker System
B.26 (A thru D)	Forward Looking Infrared System
B.27 (A thru D)	Strike Camera System
B.28 (A thru D)	Mission Computer System
B.29 (A thru B)	Stores Management System
B.30 (A thru B)	BORESIGHT
B.31 (A thru D)	Navigation Infrared Receiving System
B.32 (A thru D)	Digital Map Set
B.33 (A thru D)	Maintenance Status Display and Recording System
B.34 (A thru D)	Flight Incident Recording and Monitoring System
B.35 (A thru D)	Advanced Tactical Air Reconnaissance System

- A. LECTURE NUMBER:** F/A-18 MOS 6317 A.01 (A thru H)
- B. TIME:** 1.5 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Support/Special Equipment
- F. OBJECTIVE:** Student will be able to demonstrate/apply knowledge of the operation, care, and maintenance requirements of applicable work center support/special equipment.
- G. INSTRUCTIONAL AIDES:**
- H. REFERENCES:**
1. A1-F18AC-GAI-000, Organizational Maintenance General Aircraft Information
 2. A1-F18AC-LMM-000, Organizational Maintenance Line Maintenance Procedures
 3. A1-F18AX-WRM-000, Organizational Maintenance Wiring Repair with Parts Data General Wiring Repair Procedures
 4. A1-F18AC-744-300, Organizational Maintenance with IPB Forward Looking Infrared System
 5. AG-000AC-GSE-000, Organizational and Intermediate Maintenance with IPB Miscellaneous Peculiar Support Equipment
 6. AG-420BO-MRC-000, Bomb Hoist HLU-288/E
 7. NA 19-15BC-13, Organizational and Intermediate Maintenance Instructions with IPB Weapons Skid Aero 21C
 8. NA 19-600-75-6-1, Preoperational Checklist Weapon Skid Aero 21A/C
- I. PRESENTATION:** This period of instruction will inform students about the operation, care, and maintenance requirements of applicable work center support / special equipment.

NOTE: Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.

1. Discuss operation, care, and maintenance of the F/A-18 utility power adapter (74D421139-1001). REF: A1-F18AC-LMM-000
2. Discuss operation, care, and maintenance of the portable air cylinder (960A80D1). REF: A1-F18AC-LMM-000
3. Discuss operation, care, and maintenance of the heating tool (HT-900). REF: A1-F18AC-WRM-000
4. Discuss operation, care, and maintenance of the wire repair kit. REF: A1-F18AC-WRM-000

5. Discuss operation, care, and maintenance of the bomb hoisting unit (HLU-288E). REF: A1-F18AC-744-300
6. Discuss operation, care, and maintenance of the hoisting adaptor (AN/AAS-38). REF: A1-F18AC-744-300
7. Discuss operation, care, and maintenance of the hoisting beam (AN/AAS-38). REF: A1-F18AC-744-300
8. Discuss operation, care, and maintenance of the aircraft weapon skid Aero 21C. REF: A1-F18AC-744-300

J. SUMMARY: During this period of instruction we covered the operation, care, and maintenance requirements of applicable work center support/special equipment.

K. QUESTION AND ANSWERS:

- A. LECTURE NUMBER:** F/A-18 MOS 6317 A.02 (A thru I)
- B. TIME:** 1.0 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Safety Precautions and Procedures in the work center
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of safety precautions and procedures in the work center.
- G. INSTRUCTIONAL AIDES:**
- H. REFERENCES:**
1. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
 2. A1-NAOSH-SAF-000/P5100-1, NAVAIROSH Requirements for the Shore Establishment
 3. OSHA 29 CFR 1910, OSHA Standards and Regulations for General Industry
 4. A1-F18AC-120-100, Organizational Maintenance Theory of Operation Seat, Canopy, Survival Equipment, and Boarding Ladder
 5. A1-F18AC-LMM-000, Organizational Maintenance Line Maintenance Procedures
 6. A1-F18AC-LMM-020, Organizational Maintenance Line Maintenance Emergency Procedures
- I. PRESENTATION:**
- NOTE:** Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.
1. Discuss canopy safety procedures.
 2. Discuss ejection seat safety procedures.
 3. Discuss boarding ladder procedures.
 4. Discuss controls/switches/indicators and normal positions in the cockpit.
 5. Discuss maintenance line emergency procedures.
 6. Discuss general housekeeping.
 7. Discuss shop and safety equipment.
 8. Discuss composite material safety.

J. SUMMARY: During this period of instruction we covered safety precautions and procedures in the work center.

K. QUESTION AND ANSWERS :

F/A-18 A/B/C/D MAINTENANCE TRAINING

LESSON GUIDE NUMBER: F/A-18 MOS 6337 A.03 (A thru FF)

AIRCRAFT PUBLICATIONS, DIAGRAMS, SKETCHES, and DRAWINGS

[illegible]

- A. LECTURE NUMBER:** F/A-18 MOS 6317 A.03 (A thru FF)
- B. TIME:** 1.0 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Aircraft Publications, diagrams, sketches, and drawings
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of aircraft publications, diagrams, sketches, and drawings.
- G. INSTRUCTIONAL AIDES:** Work center DTPL or squadron CTPL
- H. REFERENCES:**
1. 100 Series Publications, Principles of Operation Manuals
 2. 200 Series Publications, Testing and Troubleshooting Manuals
 3. 300 Series Publications, System Maintenance with IPB Manuals
 4. 500 Series Publications, System Schematic Manuals
 5. A1-F18AC-GAI-000, General Aircraft Information
 6. A1-F18AC-LMM-010, Line Maintenance Access Doors
 7. A1-F18AC-LMM-020, Line Maintenance Emergency Procedures
 8. A1-F18AC-PCM-000, Plane Captain Manual
 9. A1-F18AX-FIM-000, Fault Isolation Manual
 10. A1-F18AX-FRM-000, Fault Reporting Manual
 11. A1-F18AX-OLD-000/010, Organizational Flight Program Simplified Schematics
 12. A1-F18AC-LMM-000, Line Maintenance Procedures
 13. A1-F18AC-IPB-450, Parts List Index Manual
 14. A1-F18AX-MRC-000, Periodic Maintenance Information Cards
 15. A1-F18AX-MRC-200, Maintenance Requirement Cards
Daily/Special/Conditional
 16. A1-F18AX-MRC-300, Phased Maintenance Requirement Cards
 17. A1-F18AX-WDM-000/010, Wiring Diagram Manual
 18. A1-F18AX-WRM-000 thru 800, Wiring Repair Manual
 19. A1-F18AX-SCM-000/050/060/070, Software Configuration Manual
 20. A1-F18AC-WAP-000, Workaround Procedures
 21. A1-F18AX-WUC-800, Work Unit Code Manual
 22. OPNAVINST 4790.2_, Naval Aviation Maintenance Program (NAMP)
 23. NA 01-1A-509, Aircraft Corrosion Control
 24. NA 01-1A-540, Avionics Corrosion Control
 25. NA 07-1-505, Toxicity, Flashpoint, and Flammability of
Chemicals
 26. NAVSUP PUB 4500, Consolidated Hazardous Item List
 27. A1-F18AC-AML-000, Aircraft Technical Documentation List
 28. AG-000AC-GSE-000/100, Miscellaneous Peculiar Support Equipment

I. PRESENTATION: Review with the student following publications as the pertain to the work center:

1. 100 Series Publications
2. 200 Series Publications
3. 300 Series Publications
4. 500 Series Publications
5. A1-F18AC-GAI-000
6. A1-F18AC-LMM-010
7. A1-F18AC-LMM-020
8. A1-F18AC-PCM-000
9. A1-F18AX-FIM-000
10. A1-F18AX-FRM-000
11. A1-F18AX-OLD-000/010
12. A1-F18AC-LMM-000
13. A1-F18AC-IPB-450
14. A1-F18AX-MRC-000
15. A1-F18AX-MRC-200
16. A1-F18AX-MRC-300
17. A1-F18AX-WDM-000/010
18. A1-F18AX-WRM-000 thru 800
19. A1-F18AX-SCM-000/050/060/070
20. A1-F18AC-WAP-000
21. A1-F18AX-WUC-800
22. OPNAVINST 4790.2_
23. NA 01-1A-509
24. NA 01-1A-540
25. NA 07-1-505
26. NAVSUP PUB 4500
27. A1-F18AC-AML-000
28. AG-000AC-GSE-000/100

J. SUMMARY: During this period of instruction we discussed applicable aircraft publications, diagrams, sketches, and drawing for the work center.

K. QUESTION AND ANSWERS :

- A. LECTURE NUMBER:** F/A-18 MOS 6317 A.04 (A thru T)
- B. TIME:** 1.0 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Precision Measuring Equipment
- F. OBJECTIVE:** Student will be able to demonstrate knowledge and operation of applicable precision measuring equipment.

G. INSTRUCTIONAL AIDES:

1. Proximity switch control, 74D420030-1001
2. Fluke multimeter, 77/AN
3. AN/MLV-607(V)5

H. REFERENCES:

1. A1-F18AC-LMM-000, Organizational Line Maintenance Procedures
2. A1-F18AC-510-200, Organizational Maintenance Testing and Troubleshooting Instrument Systems
3. A1-F18AX-WRM-000, Wire Repair Manuals
4. A1-F18AX-460-Series, Fuel Systems Publications
5. A1-F18AC-LWS-000, Airborne Weapons/Stores Loading Manual
6. A1-F18AC-730-300, Systems Maintenance INS, Backup Attitude, and Navigation Systems
7. A1-F18AC-130-310, Organizational Maintenance with IPB Landing Gear and Related Systems
8. Applicable operator's manuals

I. PRESENTATION:

NOTE: Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.

1. Review operation of the inch-pound torque wrench.
2. Review operation of the foot-pound torque wrench.
3. Review operation of the balance scale, trip 0.10-gram graduation.
4. Review operation of the balance scale, trip 0.1 to 0.50-gram graduation.
5. Review operation of the resiliency tester, DDPH-250.
6. Review operation of the push-pull gauge, DDPH-50.
7. Review operation of the thermometer.
8. Review operation of the dial indicator tensiometer.
9. Review operation of the multimeter.

10. Review operation of the micrometer set.

J. SUMMARY: During this period of instruction we covered applicable precision measuring equipment.

K. QUESTION AND ANSWERS :

F/A-18 A/B/C/D MAINTENANCE TRAINING

LESSON GUIDE NUMBER: F/A-18 MOS 6317 A.05 (A-B)

**ELECTRICAL STATIC DISCHARGE (ESD), ELECTRICAL BONDING, and
ELECTROMAGNETIC COMPATIBILITY (EMC)**

NAME / RANK

[illegible]

- A. LECTURE NUMBER:** F/A-18 MOS 6317 A.05 (A-B)
- B. TIME:** 1.0 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Electrical Static Discharge (ESD), Electrical Bonding, and Electromagnetic Compatibility (EMC)
- F. OBJECTIVE:** Student will be able to demonstrate/apply knowledge of Electrical Static Discharge (ESD), electrical bonding, and Electromagnetic Compatibility (EMC).
- G. INSTRUCTIONAL AIDES:**
- H. REFERENCES:**
1. NA 01-1A-23, Electronic Assembly Repair Standard Maintenance Practice Manual
 2. A1-F18AX-WRM Series, Wire Repairs Manuals
- I. PRESENTATION:**
- NOTE:** Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.
1. Discuss Electrical Static Discharge protection.
 2. Discuss electrical bonding and Electromagnetic compatibility protection.
- J. SUMMARY:** During this period of instruction we covered Electrical Static Discharge (ESD), electrical bonding, and Electromagnetic Compatibility (EMC).
- K. QUESTION AND ANSWERS:**

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.01 (A thru M)
- B. TIME:** 1.0 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Scheduled/Unscheduled Inspections
- F. OBJECTIVE:** Student will be able to perform scheduled and unscheduled inspections safely and comply with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.
- G. INSTRUCTIONAL AIDES:** F/A 18 Aircraft
- H. REFERENCES:**

1. A1-F18AC-MRC-000, Periodic Maintenance Information Cards
2. A1-F18AC-MRC-100, Turnaround Checklist
3. A1-F18AC-MRC-200, Daily Maintenance Requirement Cards
4. A1-F18AC-MRC-300, Phased Maintenance Requirement Cards
5. A1-F18AC-LMM-030, Organizational Maintenance Conditional Inspection Procedures
6. A1-F18AX-WUC-800, Work Unit Code Manual
7. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
8. NA 16-1-540, Avionics Systems Cleaning and Corrosion Control Manual

I. PRESENTATION:

NOTE: Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.

1. Review electrical and hydraulic application, as well as jacking and servicing procedures. REF: A1-F18AC-LMM-000
2. Review Periodic Maintenance Procedures REF: A1-F18AC-MRC-000
3. Review Turnaround Checklist Requirements. REF: A1-F18AC-MRC-100
4. Review Daily, Special, and Preservation Inspection Requirements. REF: A1-F18AC-MRC-200
5. Review Conditional Inspection Procedures. REF: A1-F18AC-LMM-030
6. Discuss Phase Maintenance Requirements. REF: A1-F18AC-MRC-300.
7. Discuss 14-Day Special Inspection requirements. REF: A1-F18AX-MRC-250
8. Discuss 28-Day Special Inspection requirements. REF: A1-F18AX-MRC-250

9. Discuss 42-Day Special Inspection requirements. REF: A1-F18AX-MRC-250
10. Discuss 84-Day Special Inspection requirements. REF: A1-F18AX-MRC-250
11. Discuss 364-Day Special Inspection requirements. REF: A1-F18AX-MRC-250
12. Discuss Preservation / De-preservation inspection requirements. REF: A1-F18AX-MRC-250
13. Discuss Pre-Carrier / Pre-deployment inspection requirements. REF: A1-F18AX-MRC-030
14. Discuss over-G flight conditional inspection requirements. REF: A1-F18AX-MRC-030
15. Discuss Acceptance/Transfer inspection requirements. REF: OPNAVINST 4790.2_
16. Discuss gun bay inspection requirements. REF: A1-F18AX-MRC-250
17. Discuss corrosion detection. REF: NA 16-1-540

J. SUMMARY: During this period of instruction we covered Periodic Maintenance, Turnaround and Daily Requirements, Special, Preservation and Conditional Maintenance Requirements and we also discussed Phase Inspections.

K. QUESTION AND ANSWERS :

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.02 (A thru D)
- B. TIME:** 1.0 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Technical Directives
- F. OBJECTIVE:** Student will be able demonstrate a knowledge of
Technical Directive Changes / Bulletins.
- G. INSTRUCTIONAL AIDES:**
- H. REFERENCES:**
1. NA 5215.12, NAVAIRSYSCOM Technical Directive System
 2. NA 5215.10, Processing of RAMEC
 3. OPNAVINST 4290.2_, Naval Aviation Maintenance Program (NAMP)
- I. PRESENTATION:**
1. Discuss the Technical Directive system. REF: NA 5215.12
 2. Discuss Rapid Action Minor Engineering Change proposals.
REF: NA 5215.10
 3. Discuss incorporating Technical Directive Changes.
REF: OPNAVINST 4790.2_
 4. Discuss incorporating Technical Directive Bulletins.
REF: OPNAVINST 4790.2_
- J. SUMMARY:** During this period of instruction we covered the
Technical Directives System, RAMECs, and incorporating
Technical Directive Changes / Bulletins.
- K. QUESTION AND ANSWERS:**

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.03 (A thru D)
- B. TIME:** 1.0 Hour
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Corrosion Control
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of the following: Detection, identification, and classification of corrosion control. Student will also be able to treat corrosion safely in accordance with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to the task.
- G. INSTRUCTIONAL AIDES:** F/A 18 Aircraft
- H. REFERENCES:**
1. NA 01-1A-509, Corrosion Control Manual
 2. NA 01-16-540, Avionics Cleaning and Corrosion Control
 3. A1-F18AC-SRM-500, Structural Repair Manual
- I. PRESENTATION:**
- NOTE:** Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.
1. Review corrosion detection, severity, classification, and identification of corrosion prone areas. REF: NA 01-1A-509
 2. Review proper 3M documentation. REF: OPNAVINST 4790.2_
- J. SUMMARY:** During this period of instruction we covered corrosion detection, identification, and classification. We also discussed proper 3M documentation, Tool Control, FOD, and Corrosion Control procedures as they pertain to a task.
- K. QUESTION AND ANSWERS:**

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.04 (A thru D)
- B. TIME:** 1.5 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Electronic Equipment Control
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of the following: Electronic equipment control theory of operation, functional check, fault isolation, and removal and replacement procedures. Students will also be able to comply with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.
- G. INSTRUCTIONAL AIDES:** F/A 18 Aircraft
- H. REFERENCES:**
1. A1-F18AX-741-100, Organizational Maintenance Principles of Operation Mission Computer System
 2. A1-F18AX-741-200, Organizational Maintenance Testing and Troubleshooting Mission Computer System
 3. A1-F18AX-741-300, Organizational Maintenance with IPB Mission Computer System
 4. A1-F18AC-LMM-000, Organizational Maintenance Line Maintenance Procedures
 5. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
 6. A1-F18AX-WUC-800, Work Unit Code Manual
 7. NA 16-1-540, Avionics Systems Cleaning and Corrosion Manual

I. PRESENTATION:

NOTE: Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.

1. Review keyboard manual data entry theory of operation. REF: A1-F18AX-741-100
2. Review EMCON function theory of operation. REF: A1-F18AX-741-100
3. Review power distribution theory of operation. REF: A1-F18AX-741-100
4. Review data communications theory of operation. REF: A1-F18AX-741-100
5. Review built-in-test theory of operation. REF: A1-F18AX-741-100

6. Review systems interface theory of operation. REF: A1-F18AX-741-100
7. Review electronic equipment control functional check procedures. REF: A1-F18AX-741-200
8. Review system failure fault isolation procedures. REF: A1-F18AX-741-200
9. Discuss R&R of the electronic equipment control (C10380/ASQ). REF: A1-F18AX-741-300
10. Discuss appropriate 3M documentation procedures. REF: NA OPNAVINST 4790.2_ and A1-F18AX-WUC-800
11. Discuss Tool Control procedures. REF: OPNAVINST 4790.2_
12. Discuss FOD prevention guidelines. REF: OPNAVINST 4790.2_
13. Discuss corrosion detection and prevention procedures. REF: NA 16-1-540

J. SUMMARY: During this period of instruction we covered electronic equipment control theory of operation, functional check, fault isolation, and removal and replacement procedures. We also discussed proper 3M documentation, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.

K. QUESTION AND ANSWERS :

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.05 (A thru D)
- B. TIME:** 1.5 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Intercom Amplifier Control
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of the following: Intercom amplifier control theory of operation, functional check, fault isolation, and removal and replacement procedures. Students will also be able to comply with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.
- G. INSTRUCTIONAL AIDES:** F/A 18 Aircraft
- H. REFERENCES:**
1. A1-F18AX-600-100, Organizational Maintenance Principles of Operation Communication, TACAN, ADF, Electronic Altimeter, IFF and MIDS Systems
 2. A1-F18AX-600-200, Organizational Maintenance Testing and Troubleshooting Communication, TACAN, ADF, Electronic Altimeter, IFF and MIDS Systems
 3. A1-F18AX-600-300, Organizational Maintenance with IPB Communication, TACAN, ADF, Electronic Altimeter, IFF and MIDS Systems
 4. A1-F18AC-LMM-000, Organizational Maintenance Line Maintenance Procedures
 5. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
 6. A1-F18AX-WUC-800, Work Unit Code Manual
 7. NA 16-1-540, Avionics Systems Cleaning and Corrosion Manual
- I. PRESENTATION:**
- NOTE:** Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.
1. Review communications system interface theory of operation. REF: A1-F18AX-600-100
 2. Review communication control panel function. REF: A1-F18AC-600-100
 3. Review systems interface theory of operation. REF: A1-F18AC-600-100
 4. Review power distribution theory of operation. REF: A1-F18AC-600-100

5. Review built-in-test theory of operation. REF: A1-F18AC-600-100
6. Review weapons tone function theory of operation. REF: A1-F18AC-600-100
7. Review intercom amplifier control functional check procedures. REF: A1-F18AC-600-200
8. Review system failure fault isolation procedures. REF: A1-F18AC-600-200
9. Discuss R&R of the intercom amplifier control (IAC, AM6979/A, AM7630/A, or AM/7539A). REF: A1-F18AC-600-300
10. Discuss R&R of the communication control panel (74A870609-1015). REF: A1-F18AC-600-300
11. Discuss appropriate 3M documentation procedures. REF: NA OPNAVINST 4790.2_ and A1-F18AX-WUC-800
12. Discuss Tool Control procedures. REF: OPNAVINST 4790.2_
13. Discuss FOD prevention guidelines. REF: OPNAVINST 4790.2_
14. Discuss corrosion detection and prevention procedures. REF: NA 16-1-540

J. SUMMARY: During this period of instruction we covered intercom amplifier control theory of operation, functional check, fault isolation, and removal and replacement procedures. We also discussed proper 3M documentation, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.

K. QUESTION AND ANSWERS :

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.06 (A thru D)
- B. TIME:** 1.5 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Communication System Control
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of the following: Communication system control theory of operation, functional check, fault isolation, and removal and replacement procedures. Students will also be able to comply with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.
- G. INSTRUCTIONAL AIDES:** F/A 18 Aircraft
- H. REFERENCES:**
1. A1-F18AX-600-100, Organizational Maintenance Principles of Operation Communication, TACAN, ADF, Electronic Altimeter, IFF and MIDS Systems
 2. A1-F18AX-741-100, Organizational Maintenance Principles of Operation Mission Computer System
 3. A1-F18AX-741-200, Organizational Maintenance Testing and Troubleshooting Mission Computer System
 4. A1-F18AX-741-300, Organizational Maintenance with IPB Mission Computer System
 5. A1-F18AC-LMM-000, Organizational Maintenance Line Maintenance Procedures
 6. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
 7. A1-F18AX-WUC-800, Work Unit Code Manual
 8. NA 16-1-540, Avionics Systems Cleaning and Corrosion Manual
- I. PRESENTATION:**
- NOTE:** Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.
1. Review data interface theory of operation. REF: A1-F18AX-741-100
 2. Review control functions theory of operation. REF: A1-F18AX-741-100
 3. Review systems interface theory of operation. REF: A1-F18AX-741-100
 4. Review power distribution theory of operation. REF: A1-F18AX-741-100

5. Review built-in-test theory of operation. REF: A1-F18AX-741-100
6. Review CNI caution function theory of operation. REF: A1-F18AX-741-100
7. Review built-in-test procedures. REF: A1-F18AX-741-200
8. Review system failure fault isolation procedures. REF: A1-F18AX-741-200
9. Discuss R&R of the communication system control (C10382/A). REF: A1-F18AX-741-300
10. Discuss communication system channelization procedures. REF: A1-F18AC-600-100
11. Discuss appropriate 3M documentation procedures. REF: NA OPNAVINST 4790.2_ and A1-F18AX-WUC-800
12. Discuss Tool Control procedures. REF: OPNAVINST 4790.2_
13. Discuss FOD prevention guidelines. REF: OPNAVINST 4790.2_
14. Discuss corrosion detection and prevention procedures. REF: NA 16-1-540

J. SUMMARY: During this period of instruction we covered communication system control theory of operation, functional check, fault isolation, and removal and replacement procedures. We also discussed proper 3M documentation, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.

K. QUESTION AND ANSWERS :

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.07 (A thru D)
- B. TIME:** 1.5 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Communication System
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of the following: Communication system theory of operation, functional check, fault isolation, and removal and replacement procedures. Students will also be able to comply with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.
- G. INSTRUCTIONAL AIDES:** F/A 18 Aircraft
- H. REFERENCES:**
1. A1-F18AC-600-100, Organizational Maintenance Principles of Operation Communication, TACAN, ADF, Electronic Altimeter, IFF and MIDS Systems
 2. A1-F18AC-600-200, Organizational Maintenance Testing and Troubleshooting Communication, TACAN, ADF, Electronic Altimeter, IFF and MIDS Systems
 3. A1-F18AC-600-300, Organizational Maintenance with IPB Communication, TACAN, ADF, Electronic Altimeter, IFF and MIDS Systems
 4. A1-F18AC-LMM-000, Organizational Maintenance Line Maintenance Procedures
 5. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
 6. A1-F18AX-WUC-800, Work Unit Code Manual
 7. NA 16-1-540, Avionics Systems Cleaning and Corrosion Manual

I. PRESENTATION:

NOTE: Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.

1. Review modes of operation theory of operation. REF: A1-F18AC-600-100
2. Review secure speech interface theory of operation. REF: A1-F18AC-600-100
3. Review antenna selection function. REF: A1-F18AC-600-100
4. Review power distribution theory of operation. REF: A1-F18AC-600-100
5. Review built-in-test theory of operation. REF: A1-F18AC-600-100

6. Review communication system functional check procedures.
REF: A1-F18AC-600-200
7. Review system failure procedures. REF: A1-F18AC-600-200
8. Discuss R&R of the Comm 1 and 2 RT 1250()/ARC. REF: A1-F18AC-600-300
9. Discuss R&R of the antenna select control panel, 74A800697-1013. REF: A1-F18AC-600-300
10. Discuss R&R of the antenna select control panel, 74A800697-1013. REF: A1-F18AC-600-300
11. Discuss R&R of the antenna selector. REF: A1-F18AC-600-300
12. Discuss R&R of the upper antenna. REF: A1-F18AC-600-300
13. Discuss R&R of the lower forward antenna. REF: A1-F18AC-600-300
14. Discuss R&R of the lower aft antenna. REF: A1-F18AC-600-300
15. Discuss R&R of the DCS radio F/A-18+. REF: A1-F18AC-600-300
16. Discuss appropriate 3M documentation procedures. REF: NA OPNAVINST 4790.2_ and A1-F18AX-WUC-800
17. Discuss Tool Control procedures. REF: OPNAVINST 4790.2_
18. Discuss FOD prevention guidelines. REF: OPNAVINST 4790.2_
19. Discuss corrosion detection and prevention procedures. REF: NA 16-1-540

J. SUMMARY: During this period of instruction we covered communication system theory of operation, functional check, fault isolation, and removal and replacement procedures. We also discussed proper 3M documentation, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.

K. QUESTION AND ANSWERS :

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.08 (A thru D)
- B. TIME:** 1.5 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** TACAN System
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of the following: TACAN system theory of operation, functional check, fault isolation, and removal and replacement procedures. Students will also be able to comply with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.
- G. INSTRUCTIONAL AIDES:** F/A 18 Aircraft
- H. REFERENCES:**
1. A1-F18AC-600-100, Organizational Maintenance Principles of Operation Communication, TACAN, ADF, Electronic Altimeter, IFF and MIDS Systems
 2. A1-F18AC-600-200, Organizational Maintenance Testing and Troubleshooting Communication, TACAN, ADF, Electronic Altimeter, IFF and MIDS Systems
 3. A1-F18AC-600-300, Organizational Maintenance with IPB Communication, TACAN, ADF, Electronic Altimeter, IFF and MIDS Systems
 4. A1-F18AC-LMM-000, Organizational Maintenance Line Maintenance Procedures
 5. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
 6. A1-F18AX-WUC-800, Work Unit Code Manual
 7. NA 16-1-540, Avionics Systems Cleaning and Corrosion Manual

I. PRESENTATION:

NOTE: Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.

1. Review receive, transmit, air-to-air operations. REF: A1-F18AC-600-100
2. Review X/Y modes theory of operation. REF: A1-F18AC-600-100
3. Review TACAN data entry and position updates. REF: A1-F18AC-600-100
4. Review EMCON interface theory of operation. REF: A1-F18AC-600-100
5. Review power distribution theory of operation. REF: A1-F18AC-600-100

6. Review built-in-test theory of operation. REF: A1-F18AC-600-100
7. Review TACAN system functional check procedures. REF: A1-F18AC-600-200
8. Review system failure procedures. REF: A1-F18AC-600-200
9. Discuss R&R of the TCN, RT-1159/A. REF: A1-F18AC-600-300
10. Discuss R&R of the TCN mount, 74A880669-1001. REF: A1-F18AC-600-300
11. Discuss R&R of the antenna, AS-3422/ARN-118(V). REF: A1-F18AC-600-300
12. Discuss appropriate 3M documentation procedures. REF: NA OPNAVINST 4790.2_ and A1-F18AX-WUC-800
13. Discuss Tool Control procedures. REF: OPNAVINST 4790.2_
14. Discuss FOD prevention guidelines. REF: OPNAVINST 4790.2_
15. Discuss corrosion detection and prevention procedures. REF: NA 16-1-540

J. SUMMARY: During this period of instruction we covered TACAN system theory of operation, functional check, fault isolation, and removal and replacement procedures. We also discussed proper 3M documentation, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.

K. QUESTION AND ANSWERS :

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.09 (A thru D)
- B. TIME:** 1.5 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** IFF System
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of the following: IFF system theory of operation, functional check, fault isolation, and removal and replacement procedures. Students will also be able to comply with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.
- G. INSTRUCTIONAL AIDES:** F/A 18 Aircraft
- H. REFERENCES:**
1. A1-F18AC-600-100, Organizational Maintenance Principles of Operation Communication, TACAN, ADF, Electronic Altimeter, IFF and MIDS Systems
 2. A1-F18AC-600-200, Organizational Maintenance Testing and Troubleshooting Communication, TACAN, ADF, Electronic Altimeter, IFF and MIDS Systems
 3. A1-F18AC-600-300, Organizational Maintenance with IPB Communication, TACAN, ADF, Electronic Altimeter, IFF and MIDS Systems
 4. A1-F18AC-LMM-000, Organizational Maintenance Line Maintenance Procedures
 5. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
 6. A1-F18AX-WUC-800, Work Unit Code Manual
 7. NA 16-1-540, Avionics Systems Cleaning and Corrosion Manual

I. PRESENTATION:

NOTE: Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.

1. Review Modes 1, 2, 3/A and C operations. REF: A1-F18AC-600-100
2. Review Mode 4 operation. REF: A1-F18AC-600-100
3. Review I/P function. REF: A1-F18AC-600-100
4. Review antenna selection operation. REF: A1-F18AC-600-100
5. Review EMCON interface and ADC interface theory of operation. REF: A1-F18AC-600-100
6. Review emergency operation. REF: A1-F18AC-600-100

7. Review power distribution theory of operation. REF: A1-F18AC-600-100
8. Review built-in-test theory of operation. REF: A1-F18AC-600-100
9. Review IFF system functional check procedures. REF: A1-F18AC-600-200
10. Review system failure fault isolation procedures. REF: A1-F18AC-600-200
11. Discuss R&R of the IFF, RT-1157A/APX-100(V). REF: A1-F18AC-600-300
12. Discuss R&R of the computer-transponder, KIT-1C/TSEC. REF: A1-F18AC-600-300
13. Discuss R&R of the KIT-1A/TSEC mount, MT-4578/U. REF: A1-F18AC-600-300
14. Discuss R&R of the CIT system components. REF: A1-F18AC-600-300
15. Discuss appropriate 3M documentation procedures. REF: NA OPNAVINST 4790.2_ and A1-F18AX-WUC-800
16. Discuss Tool Control procedures. REF: OPNAVINST 4790.2_
17. Discuss FOD prevention guidelines. REF: OPNAVINST 4790.2_
18. Discuss corrosion detection and prevention procedures. REF: NA 16-1-540

J. SUMMARY: During this period of instruction we covered IFF system theory of operation, functional check, fault isolation, and removal and replacement procedures. We also discussed proper 3M documentation, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.

K. QUESTION AND ANSWERS:

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.10 (A thru D)
- B. TIME:** 1.5 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Instrument Landing System
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of the following: Instrument landing system theory of operation, functional check, fault isolation, and removal and replacement procedures. Students will also be able to comply with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.
- G. INSTRUCTIONAL AIDES:** F/A 18 Aircraft
- H. REFERENCES:**
1. A1-F18AX-630-100, Organizational Maintenance Principles of Operation Data Link, Instrument Landing, and RADAR Beacon Systems
 2. A1-F18AX-630-200, Organizational Maintenance Testing and Troubleshooting Data Link, Instrument Landing, and RADAR Beacon Systems
 3. A1-F18AX-630-300, Organizational Maintenance with IPB Data Link, Instrument Landing, and RADAR Beacon Systems
 4. A1-F18AX-LMM-000, Organizational Maintenance Line Maintenance Procedures
 5. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
 6. A1-F18AX-WUC-800, Work Unit Code Manual
 7. NA 16-1-540, Avionics Systems Cleaning and Corrosion Manual
- I. PRESENTATION:**
- NOTE:** Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.
1. Review modes of operation. REF: A1-F18AX-630-100
 2. Review power distribution theory of operation. REF: A1-F18AX-630-100
 3. Review built-in-test theory of operation. REF: A1-F18AX-630-100
 4. Review system failure fault isolation procedures. REF: A1-F18AX-630-200
 5. Discuss R&R of the radio receiver, R-1379()/ARA-63. REF: A1-F18AX-630-300

6. Discuss R&R of the receiver mount, 74A880642-1003. REF: A1-F18AX-630-300
7. Discuss R&R of the pulse decoder, KY-651()/ARA-63. REF: A1-F18AX-630-300
8. Discuss R&R of the KU-band antenna, AS3361/ARA-63. REF: A1-F18AX-630-300
9. Discuss R&R of the KU-band waveguide assembly. REF: A1-F18AX-630-300
10. Discuss appropriate 3M documentation procedures. REF: NA OPNAVINST 4790.2_ and A1-F18AX-WUC-800
11. Discuss Tool Control procedures. REF: OPNAVINST 4790.2_
12. Discuss FOD prevention guidelines. REF: OPNAVINST 4790.2_
13. Discuss corrosion detection and prevention procedures. REF: NA 16-1-540

J. SUMMARY: During this period of instruction we covered instrument landing system theory of operation, functional check, fault isolation, and removal and replacement procedures. We also discussed proper 3M documentation, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.

K. QUESTION AND ANSWERS :

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.11 (A thru D)
- B. TIME:** 1.5 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** RADAR Beacon System
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of the following: RADAR Beacon system theory of operation, functional check, fault isolation, and removal and replacement procedures. Students will also be able to comply with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.
- G. INSTRUCTIONAL AIDES:** F/A 18 Aircraft
- H. REFERENCES:**
1. A1-F18AX-630-100, Organizational Maintenance Principles of Operation Data Link, Instrument Landing, and RADAR Beacon Systems
 2. A1-F18AX-630-200, Organizational Maintenance Testing and Troubleshooting Data Link, Instrument Landing, and RADAR Beacon Systems
 3. A1-F18AX-630-300, Organizational Maintenance with IPB Data Link, Instrument Landing, and RADAR Beacon Systems
 4. A1-F18AX-LMM-000, Organizational Maintenance Line Maintenance Procedures
 5. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
 6. A1-F18AX-WUC-800, Work Unit Code Manual
 7. NA 16-1-540, Avionics Systems Cleaning and Corrosion Manual

I. PRESENTATION:

NOTE: Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.

1. Review modes of operation. REF: A1-F18AX-630-100
2. Review EMCON interface theory of operation. REF: A1-F18AX-630-100
3. Review power distribution theory of operation. REF: A1-F18AX-630-100
4. Review built-in-test theory of operation. REF: A1-F18AX-630-100
5. Review RADAR beacon system functional check procedures. REF: A1-F18AX-630-200

6. Review system failure fault isolation procedures. REF: A1-F18AX-630-200
7. Discuss R&R of the RADAR receiver, R-1623/APN. REF: A1-F18AX-630-300
8. Discuss R&R of the RADAR receiver/transmitter, RT-1028/APN. REF: A1-F18AX-630-300
9. Discuss R&R of the R/T mount, 74A880604-2011. REF: A1-F18AX-630-300
10. Discuss R&R of the receiver mount, 74A880603-2003. REF: A1-F18AX-630-300
11. Discuss R&R of the X-band antenna, AS-3017/APN. REF: A1-F18AX-630-300
12. Discuss R&R of the KA-band antenna, AS-3362/APN. REF: A1-F18AX-630-300
13. Discuss R&R of the KA-band waveguide assembly. REF: A1-F18AX-630-300
14. Discuss appropriate 3M documentation procedures. REF: NA OPNAVINST 4790.2_ and A1-F18AX-WUC-800
15. Discuss Tool Control procedures. REF: OPNAVINST 4790.2_
16. Discuss FOD prevention guidelines. REF: OPNAVINST 4790.2_
17. Discuss corrosion detection and prevention procedures. REF: NA 16-1-540

J. SUMMARY: During this period of instruction we covered RADAR beacon system theory of operation, functional check, fault isolation, and removal and replacement procedures. We also discussed proper 3M documentation, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.

K. QUESTION AND ANSWERS:

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.12 (A thru D)
- B. TIME:** 1.5 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Data Link System
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of the following: Data link system theory of operation, functional check, fault isolation, and removal and replacement procedures. Students will also be able to comply with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.
- G. INSTRUCTIONAL AIDES:** F/A 18 Aircraft
- H. REFERENCES:**
1. A1-F18AX-630-100, Organizational Maintenance Principles of Operation Data Link, Instrument Landing, and RADAR Beacon Systems
 2. A1-F18AC-630-110/C, Data Link, Instrument Landing, and RADAR Beacon Systems (Confidential)
 3. A1-F18AX-630-200, Organizational Maintenance Testing and Troubleshooting Data Link, Instrument Landing, and RADAR Beacon Systems
 4. A1-F18AX-630-300, Organizational Maintenance with IPB Data Link, Instrument Landing, and RADAR Beacon Systems
 5. A1-F18AX-LMM-000, Organizational Maintenance Line Maintenance Procedures
 6. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
 7. A1-F18AX-WUC-800, Work Unit Code Manual
 8. NA 16-1-540, Avionics Systems Cleaning and Corrosion Manual

I. PRESENTATION:

NOTE: Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.

1. Review modes of operation. REF: A1-F18AX-630-100
2. Review EMCON interface theory of operation. REF: A1-F18AX-630-100
3. Review power distribution theory of operation. REF: A1-F18AX-630-100
4. Review built-in-test theory of operation. REF: A1-F18AX-630-100
5. Review universal test message. REF: A1-F18AX-630-100

6. Review data link system functional check procedures. REF: A1-F18AX-630-200
7. Review system failure fault isolation procedures. REF: A1-F18AX-630-200
8. Discuss R&R of the receiver/transmitter/processor, RT-1379()/ASW. REF: A1-F18AX-630-300
9. Discuss R&R of the band pass filter, P-1472/ARC. REF: A1-F18AX-630-300
10. Discuss R&R of the RTP mount, 74A800801-1019. REF: A1-F18AX-630-300
11. Discuss R&R of the receiver mount, 74A880603-2003. REF: A1-F18AX-630-300
12. Discuss appropriate 3M documentation procedures. REF: NA OPNAVINST 4790.2_ and A1-F18AX-WUC-800
13. Discuss Tool Control procedures. REF: OPNAVINST 4790.2_
14. Discuss FOD prevention guidelines. REF: OPNAVINST 4790.2_
15. Discuss corrosion detection and prevention procedures. REF: NA 16-1-540

J. SUMMARY: During this period of instruction we covered data link system theory of operation, functional check, fault isolation, and removal and replacement procedures. We also discussed proper 3M documentation, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.

K. QUESTION AND ANSWERS :

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.13 (A thru D)
- B. TIME:** 1.5 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Auto Direction Finder Set
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of the following: Auto direction finder set theory of operation, functional check, fault isolation, and removal and replacement procedures. Students will also be able to comply with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.
- G. INSTRUCTIONAL AIDES:** F/A 18 Aircraft
- H. REFERENCES:**
1. A1-F18AC-600-100, Organizational Maintenance Principles of Operation Communication, TACAN, ADF, Electronic Altimeter, IFF and MIDS Systems
 2. A1-F18AC-600-200, Organizational Maintenance Testing and Troubleshooting Communication, TACAN, ADF, Electronic Altimeter, IFF and MIDS Systems
 3. A1-F18AC-600-300, Organizational Maintenance with IPB Communication, TACAN, ADF, Electronic Altimeter, IFF and MIDS Systems
 4. A1-F18AX-LMM-000, Organizational Maintenance Line Maintenance Procedures
 5. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
 6. A1-F18AX-WUC-800, Work Unit Code Manual
 7. NA 16-1-540, Avionics Systems Cleaning and Corrosion Manual
- I. PRESENTATION:**
- NOTE:** Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.
1. Review signal reception operation. REF: A1-F18AC-600-100
 2. Review audio signal/bearing hold processing. REF: A1-F18AC-600-100
 3. Review power distribution theory of operation. REF: A1-F18AC-600-100
 4. Review auto direction finder set system functional check procedures. REF: A1-F18AC-600-200

5. Review system failure fault isolation procedures. REF: A1-F18AC-600-200
6. Discuss R&R of the direction finder OA-8697()/ARD. REF: A1-F18AC-600-300
7. Discuss R&R of the ADF support assembly, 74A880610-1003. REF: A1-F18AC-600-300
8. Discuss R&R of the ADF antenna screen and ground assembly, 74A880659-1001. REF: A1-F18AC-600-300
9. Discuss appropriate 3M documentation procedures. REF: NA OPNAVINST 4790.2_ and A1-F18AX-WUC-800
10. Discuss Tool Control procedures. REF: OPNAVINST 4790.2_
11. Discuss FOD prevention guidelines. REF: OPNAVINST 4790.2_
12. Discuss corrosion detection and prevention procedures. REF: NA 16-1-540

J. SUMMARY: During this period of instruction we covered auto direction finder set theory of operation, functional check, fault isolation, and removal and replacement procedures. We also discussed proper 3M documentation, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.

K. QUESTION AND ANSWERS :

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.14 (A thru D)
- B. TIME:** 1.5 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Secure Speech System
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of the following: Secure speech system theory of operation, functional check, fault isolation, and removal and replacement procedures. Students will also be able to comply with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.
- G. INSTRUCTIONAL AIDES:** F/A 18 Aircraft
- H. REFERENCES:**
1. A1-F18AC-600-100, Organizational Maintenance Principles of Operation Communication, TACAN, ADF, Electronic Altimeter, IFF and MIDS Systems
 2. A1-F18AC-600-200, Organizational Maintenance Testing and Troubleshooting Communication, TACAN, ADF, Electronic Altimeter, IFF and MIDS Systems
 3. A1-F18AC-600-300, Organizational Maintenance with IPB Communication, TACAN, ADF, Electronic Altimeter, IFF and MIDS Systems
 4. A1-F18AX-LMM-000, Organizational Maintenance Line Maintenance Procedures
 5. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
 6. A1-F18AX-WUC-800, Work Unit Code Manual
 7. NA 16-1-540, Avionics Systems Cleaning and Corrosion Manual

I. PRESENTATION:

NOTE: Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.

1. Review cipher operation. REF: A1-F18AC-600-100
2. Review zeroize operation. REF: A1-F18AC-600-100
3. Review power distribution theory of operation. REF: A1-F18AC-600-100
4. Review secure speech system functional check procedures. REF: A1-F18AC-600-200
5. Review system failure fault isolation procedures. REF: A1-F18AC-600-200

6. Discuss R&R of the KY-58 control panel assembly, KY58TSEC.
REF: A1-F18AC-600-300
7. Discuss R&R of the DCS radio. REF: A1-F18AC-600-300
8. Discuss appropriate 3M documentation procedures. REF: NA
OPNAVINST 4790.2_ and A1-F18AX-WUC-800
9. Discuss Tool Control procedures. REF: OPNAVINST 4790.2_
10. Discuss FOD prevention guidelines. REF: OPNAVINST 4790.2_
11. Discuss corrosion detection and prevention procedures. REF:
NA 16-1-540

J. SUMMARY: During this period of instruction we covered secure speech system theory of operation, functional check, fault isolation, and removal and replacement procedures. We also discussed proper 3M documentation, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.

K. QUESTION AND ANSWERS :

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.15 (A thru D)
- B. TIME:** 1.5 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Video Recording System
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of the following: Video recording system theory of operation, functional check, fault isolation, and removal and replacement procedures. Students will also be able to comply with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.
- G. INSTRUCTIONAL AIDES:** F/A 18 Aircraft
- H. REFERENCES:**
1. A1-F18AC-770-100, Organizational Maintenance Principles of Operation Video Recording and Reconnaissance Systems
 2. A1-F18AC-770-200, Organizational Maintenance Testing and Troubleshooting Video Recording and Reconnaissance Systems
 3. A1-F18AC-770-300, Organizational Maintenance with IPB Video Recording and Reconnaissance Systems
 4. A1-F18AX-LMM-000, Organizational Maintenance Line Maintenance Procedures
 5. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
 6. A1-F18AX-WUC-800, Work Unit Code Manual
 7. NA 16-1-540, Avionics Systems Cleaning and Corrosion Manual
- I. PRESENTATION:**

NOTE: Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.

1. Review modes of operation. REF: A1-F18AC-770-100
2. Review video selection operation. REF: A1-F18AC-770-100
3. Review video recording system operation. REF: A1-F18AC-770-100
4. Review power distribution theory of operation. REF: A1-F18AC-770-100
5. Review built-in-test operation. REF: A1-F18AC-770-100
6. Review video recording system functional check procedures. REF: A1-F18AC-770-200
7. Review system failure fault isolation procedures. REF: A1-F18AC-770-200

8. Discuss R&R of the television camera, MX-10403/AXQ. REF: A1-F18AC-770-300
9. Discuss R&R of the audio visual recorder, RO-545/AXQ. REF: A1-F18AC-770-300
10. Discuss R&R of the video relay panel assembly, 74A870637-1001. REF: A1-F18AC-770-300
11. Discuss R&R of the video cassette. REF: A1-F18AC-770-300
12. Discuss R&R of the CVRS and V-82. REF: A1-F18AC-770-300
13. Discuss appropriate 3M documentation procedures. REF: NA OPNAVINST 4790.2_ and A1-F18AX-WUC-800
14. Discuss Tool Control procedures. REF: OPNAVINST 4790.2_
15. Discuss FOD prevention guidelines. REF: OPNAVINST 4790.2_
16. Discuss corrosion detection and prevention procedures. REF: NA 16-1-540

J. SUMMARY: During this period of instruction we covered video recording system theory of operation, functional check, fault isolation, and removal and replacement procedures. We also discussed proper 3M documentation, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.

K. QUESTION AND ANSWERS :

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.16 (A thru D)
- B. TIME:** 1.5 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Countermeasures Dispensing System
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of the following: Countermeasures dispensing system theory of operation, functional check, fault isolation, and removal and replacement procedures. Students will also be able to comply with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.
- G. INSTRUCTIONAL AIDES:** F/A 18 Aircraft
- H. REFERENCES:**
1. A1-F18AX-760-100, Organizational Maintenance Principles of Operation Tactical Electronic Warfare Systems
 2. A1-F18AX-760-200, Organizational Maintenance Testing and Troubleshooting Tactical Electronic Warfare Systems
 3. A1-F18AX-760-300, Organizational Maintenance with IPB Tactical Electronic Warfare Systems
 4. A1-F18AX-LMM-000, Organizational Maintenance Line Maintenance Procedures
 5. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
 6. A1-F18AX-WUC-800, Work Unit Code Manual
 7. NA 16-1-540, Avionics Systems Cleaning and Corrosion Manual
- I. PRESENTATION:**
- NOTE:** Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.
1. Review chaff/flare/jammer operation. REF: A1-F18AX-760-100
 2. Review modes of operation. REF: A1-F18AX-760-100
 3. Review power distribution theory of operation. REF: A1-F18AX-760-100
 4. Review countermeasure dispensing system functional check procedures. REF: A1-F18AX-760-200
 5. Review system failure fault isolation procedures. REF: A1-F18AX-760-200
 6. Discuss R&R of the electrical switching unit, SA-1874/ALE-39. REF: A1-F18AX-760-300

7. Discuss R&R of the dispenser housing, MX-7721/ALE29E. REF: A1-F18AX-760-300
8. Discuss R&R of the programmer, MX-7721/ALE-39. REF: A1-F18AX-760-300
9. Discuss R&R of the ECM control panel assembly, 74A800828-1001. REF: A1-F18AX-760-300
10. Discuss R&R of the ECM dispenser switch, 604EN94-S. REF: A1-F18AX-760-300
11. Discuss R&R of the ALE-47. REF: A1-F18AX-760-300
12. Discuss appropriate 3M documentation procedures. REF: NA OPNAVINST 4790.2_ and A1-F18AX-WUC-800
13. Discuss Tool Control procedures. REF: OPNAVINST 4790.2_
14. Discuss FOD prevention guidelines. REF: OPNAVINST 4790.2_
15. Discuss corrosion detection and prevention procedures. REF: NA 16-1-540

J. SUMMARY: During this period of instruction we covered countermeasures dispensing system theory of operation, functional check, fault isolation, and removal and replacement procedures. We also discussed proper 3M documentation, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.

K. QUESTION AND ANSWERS :

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.17 (A thru D)
- B. TIME:** 1.5 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Deceptive Countermeasures System
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of the following: Deceptive countermeasures system theory of operation, functional check, fault isolation, and removal and replacement procedures. Students will also be able to comply with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.
- G. INSTRUCTIONAL AIDES:** F/A 18 Aircraft
- H. REFERENCES:**
1. A1-F18AX-760-100, Organizational Maintenance Principles of Operation Tactical Electronic Warfare Systems
 2. A1-F18AX-760-200, Organizational Maintenance Testing and Troubleshooting Tactical Electronic Warfare Systems
 3. A1-F18AX-760-300, Organizational Maintenance with IPB Tactical Electronic Warfare Systems
 4. A1-F18AX-LMM-000, Organizational Maintenance Line Maintenance Procedures
 5. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
 6. A1-F18AX-WUC-800, Work Unit Code Manual
 7. NA 16-1-540, Avionics Systems Cleaning and Corrosion Manual
- I. PRESENTATION:**
- NOTE:** Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.
1. Review modes of operation. REF: A1-F18AX-760-100
 2. Review warning light interface operation. REF: A1-F18AX-760-100
 3. Review power distribution theory of operation. REF: A1-F18AX-760-100
 4. Review built-in-test procedures for ALQ-126A/ALQ-126B/ALQ-165. REF: A1-F18AX-760-200
 5. Review line/system sweep procedures. REF: A1-F18AX-760-200
 6. Review built-in-test procedures. REF: A1-F18AX-760-200
 7. Review system failure fault isolation procedures. REF: A1-F18AX-760-200

8. Discuss R&R of the receiver/transmitter, RT-1079()/ALQ-126A/B. REF: A1-F18AX-760-300
9. Discuss R&R of the RT1079()/ALQ-126 mount, 74A880607-1005. REF: A1-F18AX-760-300
10. Discuss R&R of the cooling air plenum, 74A830734-1019. REF: A1-F18AX-760-300
11. Discuss R&R of the antennas, ALQ-126. REF: A1-F18AX-760-300
12. Discuss R&R of the radomes. REF: A1-F18AX-760-300
13. Discuss R&R of the couplers. REF: A1-F18AX-760-300
14. Discuss R&R of the high band suppression filter, F-1471/ALQ-126. REF: A1-F18AX-760-300
15. Discuss R&R of the associated waveguide. REF: A1-F18AX-760-300
16. Discuss R&R of the ASPJ system components. REF: A1-F18AX-760-300
17. Discuss appropriate 3M documentation procedures. REF: NA OPNAVINST 4790.2_ and A1-F18AX-WUC-800
18. Discuss Tool Control procedures. REF: OPNAVINST 4790.2_
19. Discuss FOD prevention guidelines. REF: OPNAVINST 4790.2_
20. Discuss corrosion detection and prevention procedures. REF: NA 16-1-540

J. SUMMARY: During this period of instruction we covered deceptive countermeasures system theory of operation, functional check, fault isolation, and removal and replacement procedures. We also discussed proper 3M documentation, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.

K. QUESTION AND ANSWERS :

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.18 (A thru D)
- B. TIME:** 1.5 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** RADAR Warning System
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of the following: RADAR warning system theory of operation, functional check, fault isolation, and removal and replacement procedures. Students will also be able to comply with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.
- G. INSTRUCTIONAL AIDES:** F/A 18 Aircraft
- H. REFERENCES:**
1. A1-F18AX-760-100, Organizational Maintenance Principles of Operation Tactical Electronic Warfare Systems
 2. A1-F18AX-760-200, Organizational Maintenance Testing and Troubleshooting Tactical Electronic Warfare Systems
 3. A1-F18AX-760-300, Organizational Maintenance with IPB Tactical Electronic Warfare Systems
 4. A1-F18AX-LMM-000, Organizational Maintenance Line Maintenance Procedures
 5. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
 6. A1-F18AX-WUC-800, Work Unit Code Manual
 7. NA 16-1-540, Avionics Systems Cleaning and Corrosion Manual
- I. PRESENTATION:**
- NOTE:** Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.
1. Review RF detection operation. REF: A1-F18AX-760-100
 2. Review video processing operation. REF: A1-F18AX-760-100
 3. Review RADAR warning theory of operation. REF: A1-F18AX-760-100
 4. Review power distribution theory of operation. REF: A1-F18AX-760-100
 5. Review RADAR warning system functional check procedures. REF: A1-F18AX-760-200
 6. Review built-in-test procedures. REF: A1-F18AX-760-200
 7. Review line/antenna insertion loss and return loss test procedures. REF: A1-F18AX-760-200

8. Review system failure fault isolation procedures. REF: A1-F18AX-760-200
9. Discuss R&R of the receiver/transmitter, RT-1079()/ALQ-126A/B. REF: A1-F18AX-760-300
10. Discuss R&R of the countermeasures computer, CP-1293/ALR-67(V). REF: A1-F18AX-760-300
11. Discuss R&R of the CP-1293/ALR-67(V) mount, 74A880652-2003. REF: A1-F18AX-760-300
12. Discuss R&R of the control indicator, C-10250/ALR-67(V). REF: A1-F18AX-760-300
13. Discuss R&R of the azimuth indicator, IP-1276/ALR-67(V). REF: A1-F18AX-760-300
14. Discuss R&R of the antennas. REF: A1-F18AX-760-300
15. Discuss R&R of the radar receivers, R-2148/ALR-67(V). REF: A1-F18AX-760-300
16. Discuss R&R of the radio frequency transmitter switches, SA-2362/ALR-67(V). REF: A1-F18AX-760-300
17. Discuss R&R of the forward band pass filters, F-1539/ALR-67(V). REF: A1-F18AX-760-300
18. Discuss R&R of the radio receiver couplers, CU-2292/ALR-67(V). REF: A1-F18AX-760-300
19. Discuss R&R of the integrated antenna, AS-3190/ALR-67(V). REF: A1-F18AX-760-300
20. Discuss R&R of the radar receiver, R-02055/ALR-67(V). REF: A1-F18AX-760-300
21. Discuss appropriate 3M documentation procedures. REF: NA OPNAVINST 4790.2_ and A1-F18AX-WUC-800
22. Discuss Tool Control procedures. REF: OPNAVINST 4790.2_
23. Discuss FOD prevention guidelines. REF: OPNAVINST 4790.2_
24. Discuss corrosion detection and prevention procedures. REF: NA 16-1-540

J. SUMMARY: During this period of instruction we covered RADAR warning system theory of operation, functional check, fault isolation, and removal and replacement procedures. We also discussed proper 3M documentation, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.

K. QUESTION AND ANSWERS :

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.19 (A thru D)
- B. TIME:** 1.5 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Interference Blanker System
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of the following: Interference blanker system theory of operation, functional check, fault isolation, and removal and replacement procedures. Students will also be able to comply with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.
- G. INSTRUCTIONAL AIDES:** F/A 18 Aircraft
- H. REFERENCES:**
1. A1-F18AX-760-100, Organizational Maintenance Principles of Operation Tactical Electronic Warfare Systems
 2. A1-F18AX-760-200, Organizational Maintenance Testing and Troubleshooting Tactical Electronic Warfare Systems
 3. A1-F18AX-760-300, Organizational Maintenance with IPB Tactical Electronic Warfare Systems
 4. A1-F18AX-LMM-000, Organizational Maintenance Line Maintenance Procedures
 5. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
 6. A1-F18AX-WUC-800, Work Unit Code Manual
 7. NA 16-1-540, Avionics Systems Cleaning and Corrosion Manual

I. PRESENTATION:

NOTE: Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.

1. Review interference blanker system theory of operation. REF: A1-F18AX-760-100
2. Review power distribution theory of operation. REF: A1-F18AX-760-100
3. Review built-in-test procedures. REF: A1-F18AX-760-200
4. Review system failure fault isolation procedures. REF: A1-F18AX-760-200
5. Discuss R&R of the interference blanker, MX-9965/A. REF: A1-F18AX-760-300
6. Discuss appropriate 3M documentation procedures. REF: NA OPNAVINST 4790.2_ and A1-F18AX-WUC-800

7. Discuss Tool Control procedures. REF: OPNAVINST 4790.2_
8. Discuss FOD prevention guidelines. REF: OPNAVINST 4790.2_
9. Discuss corrosion detection and prevention procedures. REF:
NA 16-1-540

J. SUMMARY: During this period of instruction we covered interference blanker system theory of operation, functional check, fault isolation, and removal and replacement procedures. We also discussed proper 3M documentation, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.

K. QUESTION AND ANSWERS :

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.20 (A thru D)
- B. TIME:** 1.5 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Electronic Altimeter System
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of the following: Electronic altimeter system theory of operation, functional check, fault isolation, and removal and replacement procedures. Students will also be able to comply with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.
- G. INSTRUCTIONAL AIDES:** F/A 18 Aircraft
- H. REFERENCES:**

1. A1-F18AC-600-100, Organizational Maintenance Principles of Operation Communication, TACAN, ADF, Electronic Altimeter, IFF and MIDS Systems
2. A1-F18AC-600-200, Organizational Maintenance Testing and Troubleshooting Communication, TACAN, ADF, Electronic Altimeter, IFF and MIDS Systems
3. A1-F18AC-600-300, Organizational Maintenance with IPB Communication, TACAN, ADF, Electronic Altimeter, IFF and MIDS Systems
4. A1-F18AX-LMM-000, Organizational Maintenance Line Maintenance Procedures
5. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
6. A1-F18AX-WUC-800, Work Unit Code Manual
7. NA 16-1-540, Avionics Systems Cleaning and Corrosion Manual

I. PRESENTATION:

NOTE: Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.

1. Review modes of operation. REF: A1-F18AC-600-100
2. Review EMCON interface operation. REF: A1-F18AC-600-100
3. Review power distribution operation. REF: A1-F18AC-600-100
4. Review built-in-test procedures. REF: A1-F18AC-600-200
5. Review system failure fault isolation procedures. REF: A1-F18AC-600-200
6. Discuss R&R of the electronic altimeter, RT-1015()/APN-194. REF: A1-F18AC-600-300

7. Discuss R&R of the height indicator, ID-2163/A. REF: A1-F18AC-600-300
8. Discuss R&R of the antenna, AS-2595/APN-194. REF: A1-F18AC-600-300
9. Discuss appropriate 3M documentation procedures. REF: NA OPNAVINST 4790.2_ and A1-F18AX-WUC-800
10. Discuss Tool Control procedures. REF: OPNAVINST 4790.2_
11. Discuss FOD prevention guidelines. REF: OPNAVINST 4790.2_
12. Discuss corrosion detection and prevention procedures. REF: NA 16-1-540

J. SUMMARY: During this period of instruction we covered electronic altimeter system theory of operation, functional check, fault isolation, and removal and replacement procedures. We also discussed proper 3M documentation, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.

K. QUESTION AND ANSWERS :

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.21 (A thru D)
- B. TIME:** 3.0 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Wire Repair Procedures
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of wire repair procedures. Students will also be able to comply with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.
- G. INSTRUCTIONAL AIDES:**
- H. REFERENCES:**

1. A1-F18AX-WRM-XXX, Organizational Maintenance Wiring Repair with Parts Data General Wiring Procedures
2. NA 01-1A-505.XXX, Installation Practices Electric and Electronic Wiring
3. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
4. A1-F18AX-WUC-800, Work Unit Code Manual
5. NA 16-1-540, Avionics Cleaning and Corrosion Manual

I. PRESENTATION:

NOTE: Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.

1. Discuss wire repair procedures. REF: A1-F18AX-WRM-XXX
2. Discuss use of wire repair manuals. REF: A1-F18AX-WRM-XXX
3. Discuss use of applicable tools and support equipment. REF: A1-F18AX-WRM-XXX
4. Discuss routing of wires, wire bundles, and coaxial cables. REF: A1-F18AX-WRM-XXX
5. Discuss repair of coaxial connectors. REF: A1-F18AX-WRM-XXX
6. Discuss repair/replacement of cannon plugs. REF: A1-F18AX-WRM-XXX
7. Discuss installation of splices, terminals, and end caps. REF: A1-F18AX-WRM-XXX
8. Discuss repair of shielded/non-shielded conductors. REF: A1-F18AX-WRM-XXX
9. Discuss environmental sealing of cables/components. REF: A1-F18AX-WRM-XXX
10. Discuss installation of insulation sleeving/protective boots. REF: A1-F18AX-WRM-XXX

11. Discuss appropriate 3M documentation procedures. REF: NA OPNAVINST 4790.2_ and A1-F18AX-WUC-800
12. Discuss Tool Control procedures. REF: OPNAVINST 4790.2_
13. Discuss FOD prevention guidelines. REF: OPNAVINST 4790.2_
14. Discuss corrosion detection and prevention procedures. REF: NA 16-1-540

J. SUMMARY: During this period of instruction we covered wire repair procedures. We also discussed proper 3M documentation, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.

K. QUESTION AND ANSWERS :

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.22 (A thru D)
- B. TIME:** 1.5 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Multipurpose Display Group
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of the following: Multipurpose display group theory of operation, functional check, fault isolation, and removal and replacement procedures. Students will also be able to comply with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.
- G. INSTRUCTIONAL AIDES:** F/A 18 Aircraft
- H. REFERENCES:**
1. A1-F18AX-745-100, Organizational Maintenance Principles of Operation Multipurpose Display Group
 2. A1-F18AX-745-200, Organizational Maintenance Testing and Troubleshooting Multipurpose Display Group
 3. A1-F18AX-745-300, Organizational Maintenance with IPB Multipurpose Display Group
 4. A1-F18AX-LMM-000, Organizational Maintenance Line Maintenance Procedures
 5. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
 6. A1-F18AX-WUC-800, Work Unit Code Manual
 7. NA 16-1-540, Avionics Systems Cleaning and Corrosion Manual
- I. PRESENTATION:**
- NOTE:** Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.
1. Review multipurpose display group theory of operation. REF: A1-F18AX-745-100
 2. Review power distribution operation. REF: A1-F18AX-745-100
 3. Review built-in-test procedures. REF: A1-F18AX-745-200
 4. Review system failure fault isolation procedures. REF: A1-F18AX-745-200
 5. Discuss R&R of the digital display indicator. REF: A1-F18AX-745-300
 6. Discuss R&R of the heads-up-display (HUD). REF: A1-F18AX-745-300

7. Discuss R&R of the HUD desiccant assembly. REF: A1-F18AX-745-300
8. Discuss R&R of the horizontal indicator (HI)/multipurpose color display (MPCD). REF: A1-F18AX-745-300
9. Discuss R&R of the moving map in HI. REF: A1-F18AX-745-300
10. Discuss R&R of the film traction module transit pack. REF: A1-F18AX-745-300
11. Discuss R&R of the HI/MCD jack screw. REF: A1-F18AX-745-300
12. Discuss R&R of the HI/MCD captive bolt. REF: A1-F18AX-745-300
13. Discuss R&R of the HUD jack screw. REF: A1-F18AX-745-300
14. Discuss R&R of the HUD captive bolt. REF: A1-F18AX-745-300
15. Discuss appropriate 3M documentation procedures. REF: NA OPNAVINST 4790.2_ and A1-F18AX-WUC-800
16. Discuss Tool Control procedures. REF: OPNAVINST 4790.2_
17. Discuss FOD prevention guidelines. REF: OPNAVINST 4790.2_
18. Discuss corrosion detection and prevention procedures. REF: NA 16-1-540

J. SUMMARY: During this period of instruction we covered multipurpose display group theory of operation, functional check, fault isolation, and removal and replacement procedures. We also discussed proper 3M documentation, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.

K. QUESTION AND ANSWERS :

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.23 (A thru D)
- B. TIME:** 1.5 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** RADAR System
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of the following: RADAR system theory of operation, functional check, fault isolation, and removal and replacement procedures. Students will also be able to comply with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.
- G. INSTRUCTIONAL AIDES:** F/A 18 Aircraft
- H. REFERENCES:**
1. A1-F18AX-742-100, Organizational Maintenance Principles of Operation RADAR System
 2. A1-F18AX-742-200, Organizational Maintenance Testing and Troubleshooting RADAR System
 3. A1-F18AX-742-300, Organizational Maintenance with IPB RADAR System
 4. A1-F18AC-270-300, Organizational Maintenance with IPB Powerplants and Related Systems
 5. A1-F18AX-LMM-000, Organizational Maintenance Line Maintenance Procedures
 6. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
 7. A1-F18AX-WUC-800, Work Unit Code Manual
 8. NA 16-1-540, Avionics Systems Cleaning and Corrosion Manual

I. PRESENTATION:

NOTE: Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.

1. Review RADAR system theory of operation. REF: A1-F18AX-742-100
2. Review built-in-test procedures. REF: A1-F18AX-742-200
3. Review system failure fault isolation procedures. REF: A1-F18AX-742-200
4. Discuss R&R of the AS3254/APG65 antenna. REF: A1-F18AX-742-300
5. Discuss R&R of the AIM-7 transmission line coupler, CU2265/APG-65. REF: A1-F18AX-742-300

6. Discuss R&R of the servo electric gimbal assembly. REF: A1-F18AX-742-300
7. Discuss R&R of the transmitter. REF: A1-F18AX-742-300
8. Discuss R&R of the receiver exciter. REF: A1-F18AX-742-300
9. Discuss R&R of the RADAR target data processor. REF: A1-F18AX-742-300
10. Discuss R&R of the computer power supply. REF: A1-F18AX-742-300
11. Discuss R&R of the electronic equipment rack. REF: A1-F18AX-742-300
12. Discuss R&R of the pantograph assembly. REF: A1-F18AX-742-300
13. Discuss R&R of the waveguide assembly. REF: A1-F18AX-742-300
14. Discuss R&R of the map gain control panel assembly. REF: A1-F18AX-742-300
15. Discuss R&R of the SNSR POD control panel assembly. REF: A1-F18AX-742-300
16. Discuss R&R of the gun gas seal. REF: A1-F18AX-742-300
17. Discuss R&R of the AIM-7 fuselage antenna. REF: A1-F18AX-742-300
18. Discuss R&R of the AIM-7 wing antenna. REF: A1-F18AX-742-300
19. Discuss R&R of the throttle grip assembly. REF: A1-F18AC-270-300
20. Discuss R&R of the APG-73 RADAR data processor. REF: A1-F18AX-742-300
21. Discuss R&R of the APG-73 RADAR power supply. REF: A1-F18AX-742-300
22. Discuss R&R of the APG-73 RADAR receiver. REF: A1-F18AX-742-300
23. Discuss appropriate 3M documentation procedures. REF: NA OPNAVINST 4790.2_ and A1-F18AX-WUC-800
24. Discuss Tool Control procedures. REF: OPNAVINST 4790.2_
25. Discuss FOD prevention guidelines. REF: OPNAVINST 4790.2_
26. Discuss corrosion detection and prevention procedures. REF: NA 16-1-540

J. SUMMARY: During this period of instruction we covered RADAR system theory of operation, functional check, fault isolation, and removal and replacement procedures. We also discussed proper 3M documentation, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.

K. QUESTION AND ANSWERS :

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.24 (A thru C)
- B. TIME:** 1.5 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** RADAR Liquid Cooling System (RLCS)
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of the following: RADAR liquid cooling system theory of operation, functional check, fault isolation, and removal and replacement procedures. Students will also be able to comply with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.
- G. INSTRUCTIONAL AIDES:** F/A 18 Aircraft
- H. REFERENCES:**
1. A1-F18AC-410-100, Organizational Maintenance Principles of Operation Environmental Control Systems
 2. A1-F18AC-410-200, Organizational Maintenance Testing and Troubleshooting Environmental Control Systems
 3. A1-F18AX-742-XXX, Organizational Maintenance Radar Systems
 4. A1-F18AX-LMM-000, Organizational Maintenance Line Maintenance Procedures
 5. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
 6. A1-F18AX-WUC-800, Work Unit Code Manual
 7. NA 16-1-540, Avionics Systems Cleaning and Corrosion Manual
- I. PRESENTATION:**

NOTE: Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.

1. Review RADAR liquid cooling system theory of operation. REF: A1-F18AX-742-100
2. Review RADAR liquid cooling system functional check procedures. REF: A1-F18AX-742-200
3. Discuss servicing using the liquid coolant make-up unit 2001MC. REF: A1-F18AX-742-300
4. Discuss appropriate 3M documentation procedures. REF: NA OPNAVINST 4790.2_ and A1-F18AX-WUC-800
5. Discuss Tool Control procedures. REF: OPNAVINST 4790.2_
6. Discuss FOD prevention guidelines. REF: OPNAVINST 4790.2_
7. Discuss corrosion detection and prevention procedures. REF: NA 16-1-540

J. SUMMARY: During this period of instruction we covered RADAR liquid cooling system theory of operation, functional check, and servicing procedures. We also discussed proper 3M documentation, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.

K. QUESTION AND ANSWERS :

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.25 (A thru D)
- B. TIME:** 1.5 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Laser Detector Tracker System
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of the following: Laser detector tracker system theory of operation, functional check, fault isolation, and removal and replacement procedures. Students will also be able to comply with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.
- G. INSTRUCTIONAL AIDES:** F/A 18 Aircraft
- H. REFERENCES:**
1. A1-F18AC-743-100, Organizational Maintenance Principles of Operation Laser Detector Tracker and Strike Camera System
 2. A1-F18AC-743-200, Organizational Maintenance Testing and Troubleshooting Laser Detector Tracker and Strike Camera System
 3. A1-F18AC-743-300, Organizational Maintenance with IPB Laser Detector Tracker and Strike Camera System
 4. A1-F18AX-LMM-000, Organizational Maintenance Line Maintenance Procedures
 5. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
 6. A1-F18AX-WUC-800, Work Unit Code Manual
 7. NA 16-1-540, Avionics Systems Cleaning and Corrosion Manual

I. PRESENTATION:

NOTE: Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.

1. Review laser detector tracker system theory of operation. REF: A1-F18AC-743-100
2. Review power distribution operation. REF: A1-F18AC-743-100
3. Review built-in-test procedures. REF: A1-F18AC-743-200
4. Review system failure fault isolation procedures. REF: A1-F18AC-743-200
5. Discuss R&R of the laser detector. REF: A1-F18AC-743-300
6. Discuss R&R of the interconnecting box. REF: A1-F18AC-743-300
7. Discuss R&R of the camera drive mounting. REF: A1-F18AC-743-300

8. Discuss R&R of the mounting adapter. REF: A1-F18AC-743-300
9. Discuss appropriate 3M documentation procedures. REF: NA OPNAVINST 4790.2_ and A1-F18AX-WUC-800
10. Discuss Tool Control procedures. REF: OPNAVINST 4790.2_
11. Discuss FOD prevention guidelines. REF: OPNAVINST 4790.2_
12. Discuss corrosion detection and prevention procedures. REF: NA 16-1-540

J. SUMMARY: During this period of instruction we covered laser designator tracker system theory of operation, functional check, fault isolation, and removal and replacement procedures. We also discussed proper 3M documentation, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.

K. QUESTION AND ANSWERS:

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.26 (A thru D)
- B. TIME:** 1.5 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Forward Looking Infrared System
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of the following: Forward looking infrared system theory of operation, functional check, fault isolation, and removal and replacement procedures. Students will also be able to comply with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.
- G. INSTRUCTIONAL AIDES:** F/A 18 Aircraft
- H. REFERENCES:**
1. A1-F18AC-744-100, Organizational Maintenance Principles of Operation Forward Looking Infrared System
 2. A1-F18AC-744-200, Organizational Maintenance Testing and Troubleshooting Forward Looking Infrared System
 3. A1-F18AC-744-300, Organizational Maintenance with IPB Forward Looking Infrared System
 4. A1-F18AX-LMM-000, Organizational Maintenance Line Maintenance Procedures
 5. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
 6. A1-F18AX-WUC-800, Work Unit Code Manual
 7. NA 16-1-540, Avionics Systems Cleaning and Corrosion Manual

I. PRESENTATION:

NOTE: Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.

1. Review forward looking infrared system theory of operation. REF: A1-F18AC-744-100
2. Review power distribution operation. REF: A1-F18AC-744-100
3. Review built-in-test procedures. REF: A1-F18AC-744-200
4. Review system failure fault isolation procedures. REF: A1-F18AC-744-200
5. Discuss R&R of the FLIR pod. REF: A1-F18AC-744-300
6. Discuss R&R of the optic stabilizer group assembly. REF: A1-F18AC-744-300
7. Discuss R&R of the roll drive motor. REF: A1-F18AC-744-300

8. Discuss R&R of the roll drive amplifier. REF: A1-F18AC-744-300
9. Discuss R&R of the infrared receiver. REF: A1-F18AC-744-300
10. Discuss R&R of the power supply. REF: A1-F18AC-744-300
11. Discuss R&R of the controller processor. REF: A1-F18AC-744-300
12. Discuss R&R of the servo controller. REF: A1-F18AC-744-300
13. Discuss R&R of the environmental control valve assembly. REF: A1-F18AC-744-300
14. Discuss R&R of the environmental control tube assembly. REF: A1-F18AC-744-300
15. Discuss R&R of the temperature control. REF: A1-F18AC-744-300
16. Discuss R&R of the heat exchanger blowers. REF: A1-F18AC-744-300
17. Discuss R&R of the desiccant cartridge. REF: A1-F18AC-744-300
18. Discuss R&R of the environmental control electrical assembly. REF: A1-F18AC-744-300
19. Discuss R&R of the optics stabilizer. REF: A1-F18AC-744-300
20. Discuss R&R of the pod forward section. REF: A1-F18AC-744-300
21. Discuss R&R of the pod aft section. REF: A1-F18AC-744-300
22. Discuss R&R of the laser power supply. REF: A1-F18AC-744-300
23. Discuss R&R of the laser transmitters. REF: A1-F18AC-744-300
24. Discuss appropriate 3M documentation procedures. REF: NA
OPNAVINST 4790.2_ and A1-F18AX-WUC-800
25. Discuss Tool Control procedures. REF: OPNAVINST 4790.2_
26. Discuss FOD prevention guidelines. REF: OPNAVINST 4790.2_
27. Discuss corrosion detection and prevention procedures. REF: NA
NA 16-1-540

J. SUMMARY: During this period of instruction we covered forward looking infrared system theory of operation, functional check, fault isolation, and removal and replacement procedures. We also discussed proper 3M documentation, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.

K. QUESTION AND ANSWERS :

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.27 (A thru D)
- B. TIME:** 1.5 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Strike Camera System
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of the following: Strike camera system theory of operation, functional check, fault isolation, and removal and replacement procedures. Students will also be able to comply with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.
- G. INSTRUCTIONAL AIDES:** F/A 18 Aircraft
- H. REFERENCES:**
1. A1-F18AC-743-100, Organizational Maintenance Principles of Operation Laser Detector Tracker and Strike Camera System
 2. A1-F18AC-743-200, Organizational Maintenance Testing and Troubleshooting Laser Detector Tracker and Strike Camera System
 3. A1-F18AC-743-300, Organizational Maintenance with IPB Laser Detector Tracker and Strike Camera System
 4. A1-F18AX-LMM-000, Organizational Maintenance Line Maintenance Procedures
 5. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
 6. A1-F18AX-WUC-800, Work Unit Code Manual
 7. NA 16-1-540, Avionics Systems Cleaning and Corrosion Manual

I. PRESENTATION:

NOTE: Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.

1. Review strike camera system theory of operation. REF: A1-F18AC-743-100
2. Review power distribution operation. REF: A1-F18AC-743-100
3. Review built-in-test procedures. REF: A1-F18AC-743-200
4. Review system failure fault isolation procedures. REF: A1-F18AC-743-200
5. Discuss R&R of the KB35A strike recording still picture camera. REF: A1-F18AC-743-300
6. Discuss R&R of the film in the KB35A camera. REF: A1-F18AC-743-300

7. Discuss appropriate 3M documentation procedures. REF: NA OPNAVINST 4790.2_ and A1-F18AX-WUC-800
8. Discuss Tool Control procedures. REF: OPNAVINST 4790.2_
9. Discuss FOD prevention guidelines. REF: OPNAVINST 4790.2_
10. Discuss corrosion detection and prevention procedures. REF: NA 16-1-540

J. SUMMARY: During this period of instruction we covered strike camera system theory of operation, functional check, fault isolation, and removal and replacement procedures. We also discussed proper 3M documentation, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.

K. QUESTION AND ANSWERS :

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.28 (A thru D)
- B. TIME:** 1.5 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Mission Computer System
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of the following: Mission computer system theory of operation, functional check, fault isolation, and removal and replacement procedures. Students will also be able to comply with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.
- G. INSTRUCTIONAL AIDES:** F/A 18 Aircraft
- H. REFERENCES:**
1. A1-F18AX-741-100, Organizational Maintenance Principles of Operation Mission Computer System
 2. A1-F18AX-741-200, Organizational Maintenance Testing and Troubleshooting Mission Computer System
 3. A1-F18AX-741-300, Organizational Maintenance with IPB Mission Computer System
 4. A1-F18AX-SCM-000, Software Configuration Manual
 5. A1-F18AX-LMM-000, Organizational Maintenance Line Maintenance Procedures
 6. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
 7. A1-F18AX-WUC-800, Work Unit Code Manual
 8. NA 16-1-540, Avionics Systems Cleaning and Corrosion Manual
- I. PRESENTATION:**
- NOTE:** Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.
1. Review mission computer system theory of operation. REF: A1-F18AX-741-100
 2. Review power distribution operation. REF: A1-F18AX-741-100
 3. Review power up procedures. REF: A1-F18AX-741-200
 4. Review system failure fault isolation procedures. REF: A1-F18AX-741-200
 5. Discuss R&R of the mission computer. REF: A1-F18AX-741-300
 6. Discuss R&R of the MUX system impedance matching network. REF: A1-F18AX-741-300

7. Discuss R&R of the mission computer/hydraulic ISOL control panel assembly. REF: A1-F18AX-741-300
8. Discuss loading and verifying memory of the mission computer. REF: A1-F18AC-SCM-000
9. Discuss appropriate 3M documentation procedures. REF: NA OPNAVINST 4790.2_ and A1-F18AX-WUC-800
10. Discuss Tool Control procedures. REF: OPNAVINST 4790.2_
11. Discuss FOD prevention guidelines. REF: OPNAVINST 4790.2_
12. Discuss corrosion detection and prevention procedures. REF: NA 16-1-540

J. SUMMARY: During this period of instruction we covered mission computer theory of operation, functional check, fault isolation, and removal and replacement procedures. We also discussed proper 3M documentation, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.

K. QUESTION AND ANSWERS :

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.29 (A thru B)
- B. TIME:** 1.5 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Stores Management System
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of the following: Stores management system theory of operation, functional check, fault isolation, and removal and replacement procedures. Students will also be able to comply with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.
- G. INSTRUCTIONAL AIDES:** F/A 18 Aircraft
- H. REFERENCES:**
1. A1-F18AX-740-100, Organizational Maintenance Principles of Operation Weapon Control System
 2. A1-F18AX-740-200, Organizational Maintenance Testing and Troubleshooting Weapon Control System
 3. A1-F18AX-740-300, Organizational Maintenance with IPB Weapon Control System
 4. A1-F18AX-SCM-000, Software Configuration Manual
 5. A1-F18AX-LMM-000, Organizational Maintenance Line Maintenance Procedures
 6. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
 7. A1-F18AX-WUC-800, Work Unit Code Manual
 8. NA 16-1-540, Avionics Systems Cleaning and Corrosion Manual

I. PRESENTATION:

NOTE: Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.

1. Review stores management system theory of operation. REF: A1-F18AX-740-100
2. Review power distribution operation. REF: A1-F18AX-740-100
3. Discuss R&R of the SMS computer. REF: A1-F18AX-740-300
4. Discuss loading and verifying memory of the SMS computer. REF: A1-F18AC-SCM-000
5. Discuss appropriate 3M documentation procedures. REF: NA OPNAVINST 4790.2_ and A1-F18AX-WUC-800
6. Discuss Tool Control procedures. REF: OPNAVINST 4790.2_
7. Discuss FOD prevention guidelines. REF: OPNAVINST 4790.2_

8. Discuss corrosion detection and prevention procedures. REF:
NA 16-1-540

J. SUMMARY: During this period of instruction we covered stores management theory of operation, functional check, fault isolation, and removal and replacement procedures. We also discussed proper 3M documentation, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.

K. QUESTION AND ANSWERS :

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.30 (A thru B)
- B. TIME:** 1.5 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Boresight
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of the following: Boresight procedures. Students will also be able to comply with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.
- G. INSTRUCTIONAL AIDES:** F/A 18 Aircraft
- H. REFERENCES:**
1. A1-F18AC-LMM-040, Organizational Maintenance Line Maintenance Boresighting Data
 2. A1-F18AX-740-300, Organizational Maintenance with IPB Weapon Control System
 3. A1-F18AX-LMM-000, Organizational Maintenance Line Maintenance Procedures
 4. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
 5. A1-F18AX-WUC-800, Work Unit Code Manual
 6. NA 16-1-540, Avionics Systems Cleaning and Corrosion Manual
- I. PRESENTATION:**
- NOTE:** Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.
1. Review procedures to boresight harmonization of INS electrical equipment mounting base. REF: A1-F18AC-LMM-040
 2. Review procedures to boresight harmonization of M16A2 20MM gun. REF: A1-F18AC-LMM-040
 3. Review procedures to boresight harmonization of APG65/73 radar. REF: A1-F18AC-LMM-040
 4. Review procedures to boresight harmonization of weapons station #4. REF: A1-F18AC-LMM-040
 5. Review procedures to boresight harmonization of weapons station #6. REF: A1-F18AC-LMM-040
 6. Discuss R&R of the electrical boresight compensation assembly. REF: A1-F18AX-740-300
 7. Discuss appropriate 3M documentation procedures. REF: NA OPNAVINST 4790.2_ and A1-F18AX-WUC-800
 8. Discuss Tool Control procedures. REF: OPNAVINST 4790.2_

9. Discuss FOD prevention guidelines. REF: OPNAVINST 4790.2_
10. Discuss corrosion detection and prevention procedures. REF:
NA 16-1-540

J. SUMMARY: During this period of instruction we covered bore sight procedures. We also discussed proper 3M documentation, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.

K. QUESTION AND ANSWERS:

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.31 (A thru D)
- B. TIME:** 1.5 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Navigation Infrared Receiving System
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of the following: Navigation infrared receiving system theory of operation, functional check, fault isolation, and removal and replacement procedures. Students will also be able to comply with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.
- G. INSTRUCTIONAL AIDES:** F/A 18 Aircraft
- H. REFERENCES:**
1. A1-F18AX-746-100, Organizational Maintenance Principles of Operation Navigation Infrared Receiving System
 2. A1-F18AX-746-200, Organizational Maintenance Testing and Troubleshooting Navigation Infrared Receiving System
 3. A1-F18AX-746-300, Organizational Maintenance with IPB Navigation Infrared Receiving System
 4. A1-F18AX-LMM-000, Organizational Maintenance Line Maintenance Procedures
 5. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
 6. A1-F18AX-WUC-800, Work Unit Code Manual
 7. NA 16-1-540, Avionics Systems Cleaning and Corrosion Manual

I. PRESENTATION:

NOTE: Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.

1. Review navigation infrared receiving system theory of operation. REF: A1-F18AX-746-100
2. Review power distribution operation. REF: A1-F18AX-746-100
3. Review built-in-test procedures. REF: A1-F18AX-746-200
4. Review system failure fault isolation procedures. REF: A1-F18AX-746-200
5. Discuss R&R of the digital computer converter, CP-1805/AAR-50. REF: A1-F18AX-746-300
6. Discuss R&R of the infrared receiver converter R-2352/AAR-50. REF: A1-F18AX-746-300

7. Discuss R&R of the thermal control HD-1158/AAR-50. REF: A1-F18AX-746-300
8. Discuss R&R of the mounting adapter MT-6512/AAR-50. REF: A1-F18AX-746-300
9. Discuss appropriate 3M documentation procedures. REF: NA OPNAVINST 4790.2_ and A1-F18AX-WUC-800
10. Discuss Tool Control procedures. REF: OPNAVINST 4790.2_
11. Discuss FOD prevention guidelines. REF: OPNAVINST 4790.2_
12. Discuss corrosion detection and prevention procedures. REF: NA 16-1-540

J. SUMMARY: During this period of instruction we covered navigation infrared receiving system theory of operation, functional check, fault isolation, and removal and replacement procedures. We also discussed proper 3M documentation, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.

K. QUESTION AND ANSWERS:

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.32 (A thru D)
- B. TIME:** 1.5 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Digital Map Set
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of the following: Digital map set theory of operation, functional check, fault isolation, and removal and replacement procedures. Students will also be able to comply with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.
- G. INSTRUCTIONAL AIDES:** F/A 18 Aircraft
- H. REFERENCES:**
1. A1-F18AX-731-100, Organizational Maintenance Principles of Operation Digital Map Set
 2. A1-F18AX-731-200, Organizational Maintenance Testing and Troubleshooting Digital Map Set
 3. A1-F18AX-731-300, Organizational Maintenance with IPB Digital Map Set
 4. A1-F18AX-LMM-000, Organizational Maintenance Line Maintenance Procedures
 5. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
 6. A1-F18AX-WUC-800, Work Unit Code Manual
 7. NA 16-1-540, Avionics Systems Cleaning and Corrosion Manual
- I. PRESENTATION:**
- NOTE:** Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.
1. Review digital map set theory of operation. REF: A1-F18AX-731-100
 2. Review power distribution operation. REF: A1-F18AX-731-100
 3. Review built-in-test procedures. REF: A1-F18AX-731-200
 4. Review system failure fault isolation procedures. REF: A1-F18AX-731-200
 5. Discuss R&R of the digital computer converter, CP-1805/AAR-50. REF: A1-F18AX-731-300
 6. Discuss R&R of the digital map computer, CP-1802/ASQ-196. REF: A1-F18AX-731-300
 7. Discuss R&R of the digital memory unit, MU-928/ASQ-196. REF: A1-F18AX-731-300

8. Discuss appropriate 3M documentation procedures. REF: NA OPNAVINST 4790.2_ and A1-F18AX-WUC-800
9. Discuss Tool Control procedures. REF: OPNAVINST 4790.2_
10. Discuss FOD prevention guidelines. REF: OPNAVINST 4790.2_
11. Discuss corrosion detection and prevention procedures. REF: NA 16-1-540

J. SUMMARY: During this period of instruction we covered digital map set theory of operation, functional check, fault isolation, and removal and replacement procedures. We also discussed proper 3M documentation, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.

K. QUESTION AND ANSWERS :

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.33 (A thru D)
- B. TIME:** 1.5 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Maintenance Status Display & Recording System
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of the following: Maintenance status display and recording system theory of operation, functional check, fault isolation, and removal and replacement procedures. Students will also be able to comply with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.
- G. INSTRUCTIONAL AIDES:** F/A 18 Aircraft
- H. REFERENCES:**
1. A1-F18AX-580-100, Organizational Maintenance Principles of Operation Maintenance Status Display and Recording System
 2. A1-F18AX-580-200, Organizational Maintenance Testing and Troubleshooting Maintenance Status Display and Recording System
 3. A1-F18AX-580-300, Organizational Maintenance with IPB Maintenance Status Display and Recording System
 4. A1-F18AX-LMM-000, Organizational Maintenance Line Maintenance Procedures
 5. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
 6. A1-F18AX-WUC-800, Work Unit Code Manual
 7. NA 16-1-540, Avionics Systems Cleaning and Corrosion Manual

I. PRESENTATION:

NOTE: Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.

1. Review Maintenance status display and recording system theory of operation. REF: A1-F18AX-580-100
2. Review power distribution operation. REF: A1-F18AX-580-100
3. Review built-in-test procedures. REF: A1-F18AX-580-200
4. Review system failure fault isolation procedures. REF: A1-F18AX-580-200
5. Discuss R&R of the signal data converter. REF: A1-F18AX-580-300
6. Discuss R&R of the signal data recorder. REF: A1-F18AX-580-300

7. Discuss R&R of the magnetic tape cartridge. REF: A1-F18AX-580-300
8. Discuss R&R of the nose wheel well digital display indicator. REF: A1-F18AX-580-300
9. Discuss procedures to re-terminate strain gauges. REF: A1-F18AX-580-300
10. Discuss appropriate 3M documentation procedures. REF: NA OPNAVINST 4790.2_ and A1-F18AX-WUC-800
11. Discuss Tool Control procedures. REF: OPNAVINST 4790.2_
12. Discuss FOD prevention guidelines. REF: OPNAVINST 4790.2_
13. Discuss corrosion detection and prevention procedures. REF: NA 16-1-540

J. SUMMARY: During this period of instruction we covered maintenance status display and recording system theory of operation, functional check, fault isolation, and removal and replacement procedures. We also discussed proper 3M documentation, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.

K. QUESTION AND ANSWERS :

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.34 (A thru D)
- B. TIME:** 1.5 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Flight Incident Recording & Monitoring System
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of the following: Flight incident recorder and monitoring system theory of operation, functional check, fault isolation, and removal and replacement procedures. Students will also be able to comply with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.
- G. INSTRUCTIONAL AIDES:** F/A 18 Aircraft
- H. REFERENCES:**
1. A1-F18AX-580-100, Organizational Maintenance Principles of Operation Flight Incident Recorder and Monitoring System
 2. A1-F18AX-580-200, Organizational Maintenance Testing and Troubleshooting Flight Incident Recorder and Monitoring System
 3. A1-F18AX-580-300, Organizational Maintenance with IPB Flight Incident Recorder and Monitoring System
 4. A1-F18AX-LMM-000, Organizational Maintenance Line Maintenance Procedures
 5. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
 6. A1-F18AX-WUC-800, Work Unit Code Manual
 7. NA 16-1-540, Avionics Systems Cleaning and Corrosion Manual

I. PRESENTATION:

NOTE: Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.

1. Review flight incident recorder and monitoring system theory of operation. REF: A1-F18AX-580-100
2. Review power distribution operation. REF: A1-F18AX-580-100
3. Review built-in-test procedures. REF: A1-F18AX-580-200
4. Review system failure fault isolation procedures. REF: A1-F18AX-580-200
5. Discuss R&R of the signal data computer. REF: A1-F18AX-580-300
6. Discuss R&R of the aircraft maintenance indicator. REF: A1-F18AX-580-300

7. Discuss R&R of the memory unit. REF: A1-F18AX-580-300
8. Discuss R&R of the memory unit mount. REF: A1-F18AX-580-300
9. Discuss R&R of the strain gauges. REF: A1-F18AX-580-300
10. Discuss R&R of the DFIRS/CSFIRS. REF: A1-F18AX-580-300
11. Discuss appropriate 3M documentation procedures. REF: NA OPNAVINST 4790.2_ and A1-F18AX-WUC-800
12. Discuss Tool Control procedures. REF: OPNAVINST 4790.2_
13. Discuss FOD prevention guidelines. REF: OPNAVINST 4790.2_
14. Discuss corrosion detection and prevention procedures. REF: NA 16-1-540

J. SUMMARY: During this period of instruction we covered flight incident recorder and monitoring system theory of operation, functional check, fault isolation, and removal and replacement procedures. We also discussed proper 3M documentation, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.

K. QUESTION AND ANSWERS:

- A. LECTURE NUMBER:** F/A-18 MOS 6317 B.35 (A thru D)
- B. TIME:** 1.5 Hours
- C. DATE PREPARED:** 31 Aug 03
- D. DATE REVIEWED:** On separate sheet
- E. TITLE:** Advanced Tactical Air Reconnaissance System
- F. OBJECTIVE:** Student will be able to demonstrate knowledge of the following: Advanced tactical air reconnaissance system theory of operation, functional check, fault isolation, and removal and replacement procedures. Students will also be able to comply with all 3M, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.
- G. INSTRUCTIONAL AIDES:** F/A 18 Aircraft
- H. REFERENCES:**

1. A1-F18AC-770-100, Organizational Maintenance Principles of Operation Video Recording and Reconnaissance Systems
2. A1-F18AC-770-200, Organizational Maintenance Testing and Troubleshooting Video Recording and Reconnaissance Systems
3. A1-F18AC-770-300, Organizational Maintenance with IPB Video Recording and Reconnaissance Systems
4. AG-517AC-OPI-000, Operational Instructions Computer Part Number 9800-04817-9002
5. A1-F18AX-LMM-000, Organizational Maintenance Line Maintenance Procedures
6. OPNAVINST 4790.2_, Naval Aviation Maintenance Program
7. A1-F18AX-WUC-800, Work Unit Code Manual
8. NA 16-1-540, Avionics Systems Cleaning and Corrosion Manual

I. PRESENTATION:

NOTE: Stress all WARNINGS, CAUTIONS and NOTES throughout the presentation.

1. Review advanced tactical air reconnaissance system theory of operation. REF: A1-F18AC-770-100
2. Review built-in-test procedures. REF: A1-F18AC-770-100
3. Review memory inspect procedures. REF: A1-F18AC-770-100
4. Review pallet pod tester procedures. REF: A1-F18AC-770-100
5. Review built-in-test operation. REF: A1-F18AC-770-100
6. Review system failure fault isolation procedures. REF: A1-F18AC-770-200

7. Discuss R&R of the RECCE pallet assembly. REF: A1-F18AC-770-300
8. Discuss R&R of the low-altitude imaging unit. REF: A1-F18AC-770-300
9. Discuss R&R of the medium-altitude imaging unit. REF: A1-F18AC-770-300
10. Discuss R&R of the reconnaissance management system. REF: A1-F18AC-770-300
11. Discuss R&R of the switchable main electronics unit. REF: A1-F18AC-770-300
12. Discuss R&R of the control electronics unit. REF: A1-F18AC-770-300
13. Discuss R&R of the rate gyro electronics. REF: A1-F18AC-770-300
14. Discuss R&R of the infrared receiver unit. REF: A1-F18AC-770-300
15. Discuss R&R of the sensor electronics unit. REF: A1-F18AC-770-300
16. Discuss R&R of the tape transport unit. REF: A1-F18AC-770-300
17. Discuss R&R of the recorder/reproducer unit. REF: A1-F18AC-770-300
18. Discuss R&R of the vertical reference gyroscope. REF: A1-F18AC-770-300
19. Discuss R&R of the transformer rectifier unit. REF: A1-F18AC-770-300
20. Discuss R&R of the RECCE cassette tape. REF: A1-F18AC-770-300
21. Discuss R&R of the ATARS control panel assembly. REF: A1-F18AC-770-300
22. Discuss R&R of the weather seal.
23. Discuss R&R of the data link pod assembly.
24. Discuss appropriate 3M documentation procedures. REF: NA OPNAVINST 4790.2_ and A1-F18AX-WUC-800
25. Discuss Tool Control procedures. REF: OPNAVINST 4790.2_
26. Discuss FOD prevention guidelines. REF: OPNAVINST 4790.2_
27. Discuss corrosion detection and prevention procedures. REF: NA 16-1-540

J. SUMMARY: During this period of instruction we covered advanced tactical air reconnaissance system theory of operation, functional check, fault isolation, and removal and replacement procedures. We also discussed proper 3M documentation, Tool Control, FOD, and Corrosion Control procedures as they pertain to each task.

K. QUESTION AND ANSWERS: